ABSTRACT OF THE DISCLOSURE

Antagonists of mammalian interleukin-15 ("IL-15") are disclosed and include muteins of IL-15 and modified IL-15 molecules that are each capable of binding to the IL-15Rα-subunit and that are incapable of transducing a signal through either the β- or γ-subunits of the IL-15 receptor complex. Also included are monoclonal antibodies against IL-15 that prevent IL-15 from effecting signal transduction through either the β- or γ-subunits of the IL-15 receptor complex. Methods of treating various disease states are disclosed, including treating allograft rejection and graft-versus-host disease.